

REMARKS/ARGUMENTS

Reconsideration and allowance in view of the foregoing amendment and the following remarks are respectfully requested.

Original claim 3 was rejected under 35 USC 112, second paragraph, as being indefinite. To advance prosecution, claim 3 has been canceled without prejudice.

Claims 1 and 2 were rejected under 35 USC 102(b/e) as anticipated by Fischer. Further, claims 3-6 were rejected under 35 USC 103(a) as unpatentable over Fischer. Applicant respectfully traverses these rejections.

Claim 1 has been amended above to provide more specifically that the cylindrical housing that accommodates the suction-side cover, the pump casing, and the impeller without any additional seal member therebetween. Claim 1 has further been amended to incorporate the dimensional characteristics of original dependent claims 3 and 5. As explained in the Summary of the Invention section of this application, according to the invention, the suction-side cover has a shoulder having a round surface in contact with a portion of the cylindrical housing that is cinched at the shoulder. This rounded corner has a radius of at least 2 mm and the shoulder has a thickness between 4 and 5 mm. Applicant has discovered that by providing a rounded shoulder having the dimensional characteristics recited in amended claim 1, the stress concentration on the suction-side cover is reduced and creeping of the suction-side cover can be prevented.

In contrast to the invention defined in amended claim 1, Fischer teaches the provision of an additional seal member (O-ring) between housing 38 and the cover (inlet plate) 34. Because a seal member is provided between the housing and the suction-side cover, it is not necessary to clinch a portion of the housing with a prescribed pressure to have a contact pressure to seal the gap between the round surface of the cover 34 and the housing. Thus, while Fischer teaches a housing accommodating the suction-side cover, pump casing and impeller, Fischer does not anticipate such an

assembly without any additional sealing member between the housing and the accommodated components. Furthermore, Fischer does not teach that the cylindrical housing is clinched at the shoulder of the suction side cover with a prescribed pressure. Indeed, clinching with a prescribed pressure is not suggested by Fischer because Fischer provides the sealing O-ring to seal between these components without a prescribed pressure clinching being necessary or desirable. Also for these reasons, Fischer does not realize a stress concentration and thus does not teach or in any way suggest to the skilled artisan that the suction side cover should have a thickness in a particular range and a rounded corner of a particular dimension e.g., to reduce stress concentration.

The Examiner asserted, with respect to claims 3, 5 and 6, that the recited dimensions would have been "obvious" to the skilled artisan "since the claim values are merely an optimum or workable range". Applicant respectfully disagrees. The dimensions recited by applicant are not merely an optimum or workable range but are specific dimensions that were the result of an analysis as detailed on pages 5-7 of this application. Because Fischer does not even provide clinching with a predetermined pressure, it is respectfully submitted that any optimization of Fischer would not obviously have lead to the dimensional determinations made by applicant and recited in claims 1 and 6.

It is clear that the initial burden of establishing a basis for denying patentability to a claimed invention rests upon the Examiner. In re Piasecki, 745 F. 2d 1468, 223 USPQ 785 (Fed. Cir. 1984). In establishing a *prima facie* case of obviousness under 35 U.S.C. § 103, it is incumbent upon the Examiner to provide a reason why one of ordinary skill in the art would have been led to arrive at the claimed invention from the prior art. Ex parte Clapp, 227 USPQ 972 (BPAI 1985).

Because none of the references of record discloses the details of the claimed invention lacking in the primary reference, nor the unique advantages thereof, there

can be no suggestion to modify the Fischer structure to contain those features. See In re Civitello, 339 F.2d 243, 144 USPQ 10, (CCPA 1964).

In any event, as noted above, Fischer expressly includes an additional seal member between the cylindrical housing and the suction side cover, so that the structure recited in applicant's claims 1 and 6, which does not include any such additional seal member but rather provides for clinching at a predetermined pressure, is not anticipated by nor obvious from Fischer.

Newly presented claim 9 is submitted to be allowable over Fischer for the same reasons as claims 1 and 6.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance and an early Notice to that effect is earnestly solicited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By:



Michelle N. Lester
Reg. No. 32,331

MNL:slj
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100